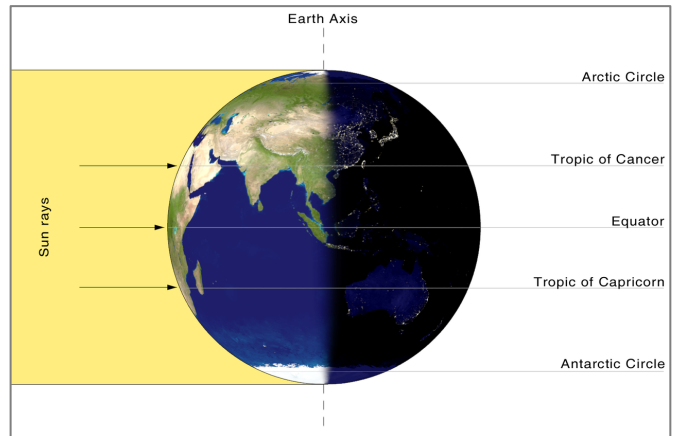


Spring Equinox – What’s the big deal?

March 20th is the date of this year’s Spring Equinox.

1. What is so special about this March date?

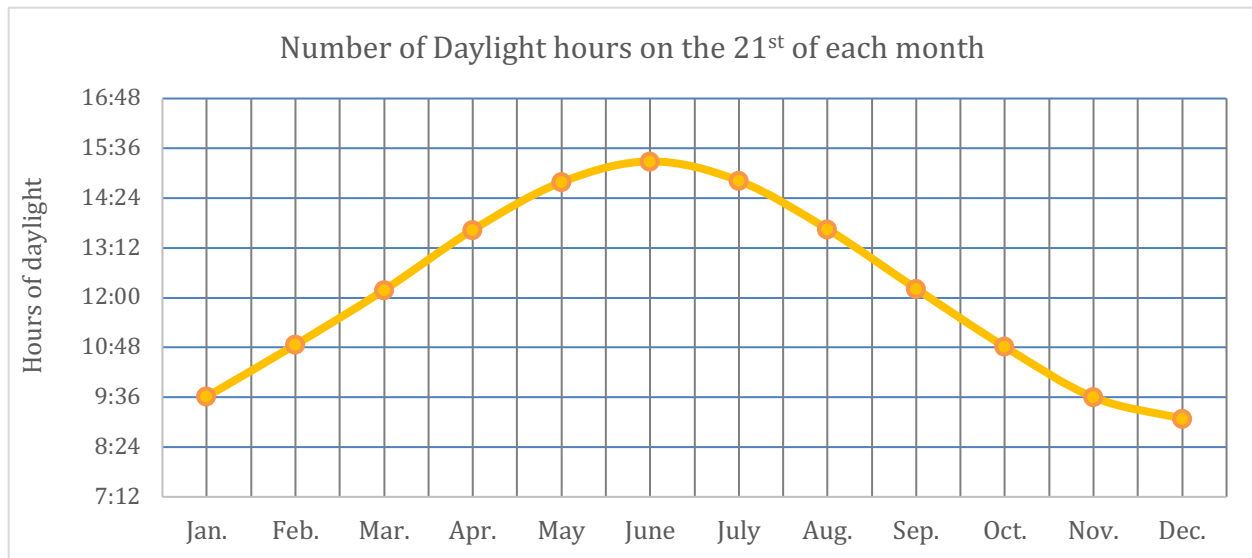


We’ve looked up the sunset and sunrise times for where we live to see how different the daylight hours are on the shortest day and the longest day. We want to figure out how long the daylight hours will be on this Spring Equinox.

	Date	Sunrise	Sunset	Length of daylight
Winter solstice = shortest day	December 21, 2022	7:10 am	4:14 pm	
Summer solstice = longest day	June 21, 2023	5:07 am	8:24 pm	

2. What’s the difference in daylight hours between the longest day and the shortest day of the year?
3. Approximately how many days are there between the longest day and the shortest day.
4. Using this information, on *average*, how much more daylight should we expect to receive each day until June 21st?
5. If the March Equinox is $\frac{1}{2}$ way between the December and June solstices, about how long should daylight be in Boston now, at the equinox. Please show your calculations.
6. How long should the nighttime last on March 20, 2023?
7. What do you notice?
8. What do you suppose was the meaning of the Latin derivation for Equinox?

We've created a graph of the number of daylight hours on the 21st of each month in Boston, MA.



9. Does the number of minutes of daylight that increases each month stay the same throughout the year? If not, how would you describe that change in daylight hours throughout the year?

10. Do you think that this is a linear progression? If not, how would you describe this variation. Please explain.



Happy Spring!



Sources: <http://www.timeanddate.com>
<https://sunrise-sunset.org/us/boston-ma/2021/2>

Brought to you by YummyMath.com

Spring Equinox – March 22, 2023
Summer Solstice – June 21, 2023
Fall Equinox – September 23, 2023
Winter Solstice – December 21, 2023